

Kansas and was doubtfully recorded by Lesquereux from New Ulm, Minn. It has also been recorded from a large number of Upper Cretaceous localities in West Greenland, along the Atlantic border of the United States from Marthas Vineyard to Alabama and Texas. The name *Laurus* does not imply a close relationship with the existing Old World species of *Laurus*, but it has been used by paleobotanists in the sense that a few wiser authors have used the pseudogeneric term *Laurophyllum*, implying some undetermined genus in the family Lauraceae.

ZOOLOGY.—*Onychocythere*, a new genus of marine ostracod from Florida, with a description of one species.¹ WILLIS L. TRESSLER, University of Buffalo. (Communicated by WALDO L. SCHMITT.)

Two specimens, a male and a female, of this ostracod were sent to the writer by Dr. Waldo L. Schmitt, curator of marine invertebrates, U. S. National Museum, for identification. They were collected by Miss Louella E. Cable from the stomach of a shad caught at Welaka, Fla., in the St. Johns River on April 1, 1938. The shad (*Alosa sapidissima*) had a total length of 478 mm and a standard length of 327 mm. There was very little food in either the stomach or intestine, as is the case with most of the adult shad examined. In the summer of 1936, two collections of shad totaling 58 specimens were taken from the Hudson River and were found to have been feeding on surface drift exclusively (Tressler and Bere, 1937). In the Florida shad the stomach contents amounted to only 4.0 cc, most of which consisted of tiny bits of plant material, rotted leaves, twigs, and grasses. In addition there were 30 copepods identified by Dr. C. B. Wilson as *Mesocyclops leuckarti* (Claus), 1 nematode, 4 daphnia identified by Dr. C. Juday as *Daphnia longispina* var. *hyalina*, 1 chironomous larva, 1 minute crab leg, and 6 ostracods. The ostracods consisted of the two specimens mentioned above and four specimens of *Cypria ophthalmica*, a common fresh-water species. The shells of the marine ostracods were somewhat disintegrated (this was particularly true of the shell of the female), while those of *Cypria* were well preserved. It seems likely, therefore, that the marine ostracods had been in the stomach for some time before the fresh-water forms had been eaten. The calcareous shell is fairly resistant to the action of weak acids, and evidently the gastric juice requires a considerable period of time before the contents are available as food. The exact location of the habitat of this ostracod is, of course, indeterminable, but as the vast majority

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of the family Cytheridae and all the known members of the subfamily Cytherinae are marine, it is logical to suppose that the shad had fed upon them in the ocean before entering the St. Johns River. All the members of the family Cytheridae are almost entirely devoid of natatory powers and are, as a consequence, strictly bottom dwellers. *Cypria*, on the other hand, is a very agile swimmer although many of the species keep close to the bottom.

The slides of the dissected ostracods have been deposited in the U. S. National Museum as type specimens.

Suborder PODOCOPA Sars

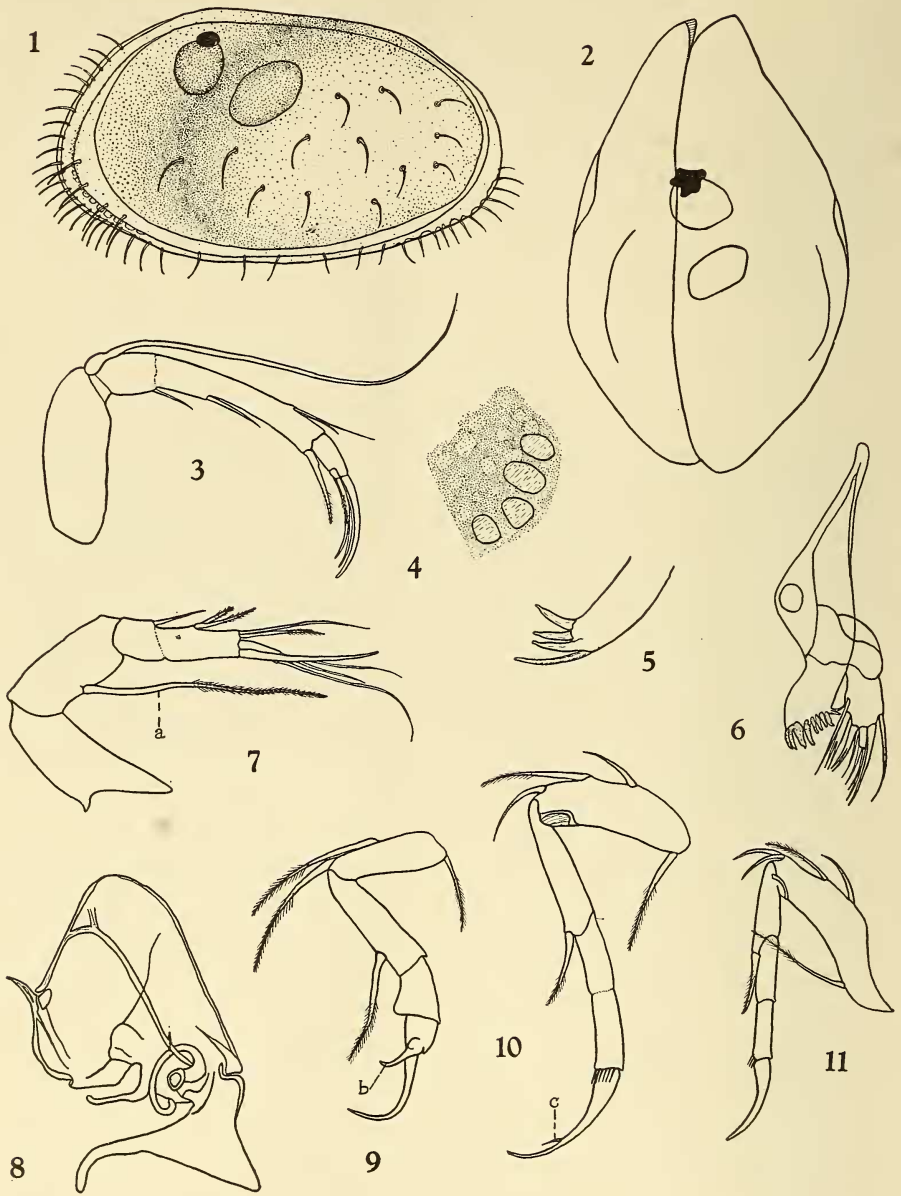
Family CYTHERIDAE Baird

Subfamily CYTHERINAE Sars

This subfamily was proposed by Sars (1928) to include the more typical Cytheridae; those closely allied to the genus *Cythere*. The shell is of very firm consistency and calcareous with a more or less sculptured surface, which may or may not bear projections or spines. Both of the antennae are strongly developed; the anterior antennae have 3 or 4 joints and possess 2 or 3 claw-like spines with several thinner bristles in between. The legs are normally developed in all the previously described genera and are of the same appearance in both sexes. The new genus described here departs from the usual conditions found in the characteristics of the thoracic legs of the subfamily Cytherinae, but as it seems to conform in all other major respects most closely to this group, it appeared best to include it here.

Onychocythere, n. gen.

Generic characters.—Shell of rather firm consistency but without sculpturing or projections. Surface of valves with a few very coarse scattered spines. A comparatively clear marginal zone at the anterior end bears numerous coarse spines. The posterior border is much narrower and has fewer and somewhat finer bristles. Seen from the dorsal side, the shell is rather tumid, the anterior extremities narrowing down from a point about two-thirds of the distance from the posterior margin. Eye, conspicuous and single. First antennae of normal appearance except for a very long and robust bristle, which arises from the posterior border of the second segment and which is coarsely haired throughout its distal half. Second antennae of normal appearance with a long tapering flagellum. Maxillae with masticatory lobes produced, the palp with three stout unarmed claws and a somewhat longer and more slender spine. Thoracic legs unequally developed and possessing several remarkable and apparently unique features which are sufficient to readily identify this genus. First leg, short and of normal appearance. Second leg, much the longest, with a thick terminal claw, which bears a peculiar aberrant bristle about one-third the length from the distal end on the posterior border. Third leg, short and heavily built with a recurved, slender terminal claw and a second short, heavy claw at its base. No differentiation of the legs in the two sexes.



Figs. 1-11.—*Onychocythere alosa*, new genus and species. 1, Lateral view of left valve of male. 2, Dorsal view (slightly tilted) of male. 3, Second antenna of female. 4, Muscle marks and detail of shell markings, female. 5, Spines of palp of masticatory lobe of maxilla of female. 6, Mandible of female. 7, First antenna of female. 8, Copulatory apparatus of male. 9, Third thoracic leg of female. 10, Second thoracic leg of female. 11, First thoracic leg of female.

Onychocythere alosa, n. sp.

Figs. 1-11

Specific characters.—*Female*: Shell of oval shape, seen laterally, with broadly rounded ends, the anterior somewhat more broadly rounded than the posterior. Greatest height anterior to the middle. Ventral margin convex. Hyaline border widest anteriorly. Surface of valves without sculpturing but marked with a very delicate pattern of polygonal areas bordered by darker margins. The anterior margin gives rise to a number of very coarse bristles, which are also sparsely scattered over the surface of the valves. Posterior border with smaller and fewer bristles. Seen dorsally, oval in outline; greatest width in the center. Anterior ends attenuated; posterior broadly rounded. Eye spot, single and conspicuous. Valves nearly equal, the right being slightly longer than the left. First antenna of normal shape for this group except for a very long and heavy spine originating from the posterior border of the second segment (Fig. 7, *a*). Terminal half of spine coarsely haired. Second antenna with a long tapering flagellum. Palp of masticatory lobe of maxilla with three stout unarmed claws and a heavy spine. Legs much differentiated, the first being the shortest and least developed. The second leg is the longest and terminates in a heavy, slightly curved claw, which bears near its tip and aberrant bristle (Fig. 10, *c*). At the base of the terminal claw is a row of six short bristles. The third leg is by far the most highly developed of the three and, while shorter than the second, is very stout and bears a strongly recurved tapering terminal claw. At the base of the terminal claw is a second heavy, short claw (Fig. 9, *b*). The bristle on the posterior margin of the second segment is very heavy and is densely haired on its distal half.

Male: Shell of similar size and shape to that of the female. Bristles much coarser. Internal structure almost identical with that of the female, including the structure of the three thoracic legs, which show the same features found in the other sex. Copulatory apparatus very large, with the basal portion rounded triangular in shape. Below, it sends off a slight, short, nearly straight projection, which is slightly hooked at its extremity. Inside it is provided with a very much curled, thick cord. Terminal portion with a slightly blunt posterior end and a much elongated anterior projection which curves ventrally near the extremity.

Color of shell undetermined.

Length of adult female, 0.91 mm. Length of adult male, 0.99 mm; height, 0.54 mm; width, 0.61 mm.

Occurrence.—Taken from the stomach of a shad caught in the St. Johns River at Welaka, Fla., on April 1, 1938. Female holotype, U. S. N. M. no. 77805. Male paratype, U. S. N. M. no. 77806.

Remarks.—This genus seems most closely allied to the genus *Cythere*, in its modern restricted sense, and agrees with it in the general conformation of the shell and in most of the internal parts. The remarkable differentiation of the thoracic legs, particularly that of the third leg, which seems to be unique in the literature, makes it seem necessary to establish a separate genus.

LITERATURE CITED

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